

programs, and in intermittent (twice weekly) programs. Initial enthusiasm about rifampin has been tempered since experience indicates the occurrence of a variety of adverse reactions. Rifampin alters the metabolism of cortisol, oral contraceptives, bilirubin excretion and even rifampin itself. The intermittent use of rifampin has produced a variety of immunologic phenomena including cutaneous reactions, abdominal reactions, systemic flu-like reactions, respiratory reactions (primarily dyspnea and wheezing), purpura (with or without thrombocytopenia) and several instances of acute renal shutdown. The use of rifampin and isoniazid in daily regimens in a large United States Public Health Service study was associated with hepatic abnormalities in 12.4 percent of patients. These abnormalities, including frank hepatitis (3.5 percent), occurred throughout the entire period of combined drug administration. Considerable interest has been raised by observations that rifampin suppresses delayed hypersensitivity. Added to these adverse reactions is the cost of rifampin—nearly 200 times that of isoniazid. Therefore, it seems wise to restrict the use of rifampin at present to patients severely ill with tuberculosis, for retreatment or drug-resistant cases, short course regimens and for disease due to susceptible atypical mycobacterial organisms.

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Amphotericin for Coccidioidomycosis

WITH INCREASING EXPERIENCE in the use of amphotericin in both disseminated and progressive coccidioidomycosis, it has become apparent in recent years that the standard recommended doses for systemic use are unnecessarily high in many cases. It is usually not necessary to give more than a 1 gram course of the drug. This 1 gram total is best given in doses of 50 mg every day or every other day, following an initial period

of gradually increasing dosages from 10 mg at the beginning to 50 mg for the fifth dose. With vigorous use of amphotericin administered locally whenever possible in meningitis, osteomyelitis, synovitis, pleural and peritoneal effusions and draining sinuses, a patient's morbidity and renal toxicity can be kept to a minimum. Surgical procedures can be scheduled within the 1 gram span to create an umbrella effect (that is, preoperative and postoperative administration of amphotericin). In the occasional case in which retreatment may be necessary, the above outlined principle would again apply with renal damage still being minimal.

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Upper Airway Obstruction

UPPER AIRWAY OBSTRUCTION due to the sequelae of intubation or tracheostomy is a potentially fatal lesion. Sudden death may occur even when the patient is in a hospital. Symptoms are not specific. Pronounced reduction in exercise tolerance, diffuse wheezing and paroxysmal dyspnea often occur before the telltale sign of stridor. Stridor is a late clinical sign and indicates the need for emergency surgical intervention.

Pulmonary function testing should be used in patients at risk of developing tracheal stenosis. A spirogram can be highly suggestive of upper airway obstruction. Both inspiratory and expiratory flow rates are decreased, but the former are reduced to a greater degree. The expiratory and inspiratory flow curves are nearly straight lines instead of the usual exponential curves (triangularization of the spirometry curve). The volumes expired in the first, second and third seconds are approximately equal. Also, maximum breathing capacity (MBC) is reduced more than would be expected on the basis of forced expiratory volume at one second (FEV₁). A final spirometric abnormality highly suggestive of upper airway obstruction is the shift in the baseline of the MBC tracing toward a lower lung volume which reflects the fact that more air leaves than enters the lung during this maneuver.

Fixed stenoses such as tracheal stricture and variable stenoses such as a paralyzed vocal cord can be differentiated with a high degree of accu-